



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Specifications and Advertisement for Bids for Latex Modified Chip Seal for Various City Streets, 2000

MEETING DATE: August 2, 2000

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council approve the specifications for the above project and authorize advertising for bids.

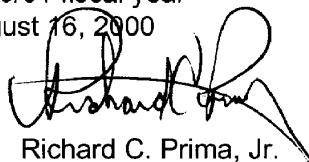
BACKGROUND INFORMATION: Chip seals are a combination of asphaltic emulsions and small rocks, similar to slurry seals, but are designed, mixed and applied differently. The City of Lodi has not applied chip seals to our streets for many years. Previously, chip seals were primarily applied to streets that did not have curb and gutter, such as alleys or streets in relatively undeveloped areas, such as Harney Lane and East Lockeford Street. Since then, there have been many improvements to the asphaltic emulsions (oil), making them better suited for specific problems by adding latex, polymers and rubber. These emulsions were designed to better retain the chips, seal pavement cracks and last longer.

Chip seals have an average life expectancy of approximately nine years in a residential area compared to only five or six years for slurry seal. Some of the pros of chip seals are a more durable surface than slurry seals for only a slightly higher cost, the ability to be driven on immediately, and better crack sealing. The negatives are that the loose gravel can damage vehicles when they travel too fast immediately after application and can create dust prior to being swept. Significant signage to control speeds and early continuous sweeping will control these negatives.

The project calls for 100,345 square yards to be chip sealed. The specifications are on file in the Public Works Department.

FUNDING: The money for this project will be coming from the Street Fund.

Project Estimate: \$75,000
Budgeted: 2000/01 fiscal year
Planned Bid Opening Date: August 16, 2000



Richard C. Prima, Jr.
Public Works Director

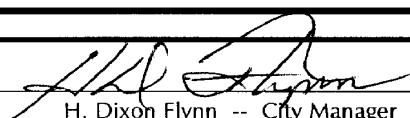
Prepared by George M. Bradley, Street Superintendent

RCP/GMB/dsg

Attachment

cc: Joel Harris, Purchasing Officer
George M. Bradley, Street Superintendent

APPROVED: _____

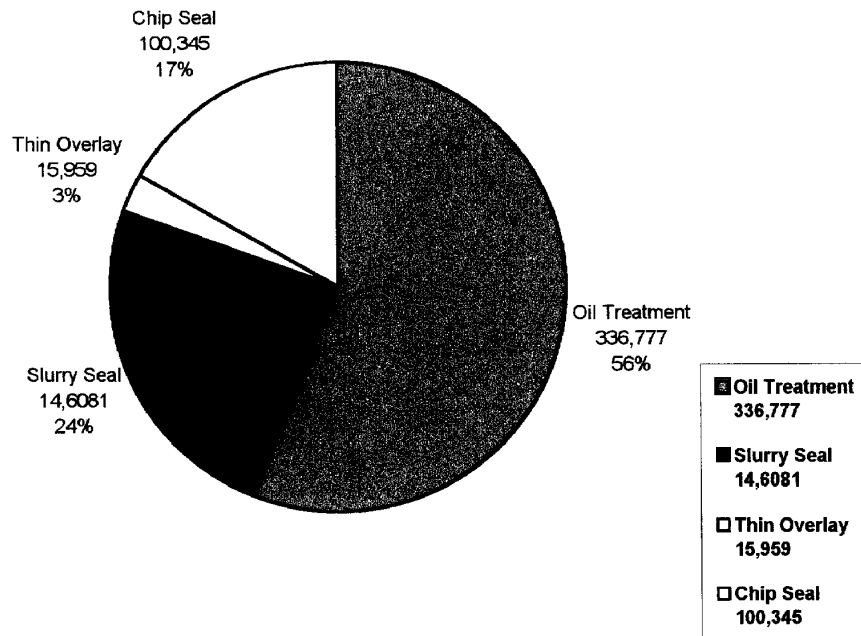


H. Dixon Flynn -- City Manager

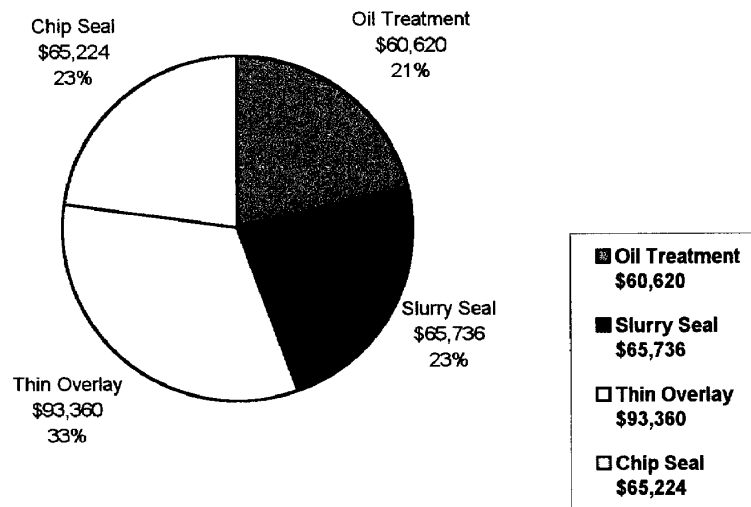
**2000 Chip Seal
Bid Sheet**

| Street Name | Boundaries | Length | Width | Sq. Ft. | Price/SF | Total Bid |
|-------------------|---------------------------|--------|-------|----------------|-----------|-----------|
| Willow Ave | Cochran-Tokay | 400 | 24 | 9,600 | \$ | - |
| Peach St | Cochran-Tokay | 400 | 24 | 9,600 | \$ | - |
| Village St | Church-E/end | 580 | 34 | 19,720 | \$ | - |
| Adobe Ct | Church-E/end | 530 | 32 | 16,960 | \$ | - |
| Hutchins Frontage | Century-end | 885 | 30 | 26,550 | \$ | - |
| Hutchins Frontage | S/Mendocino-S/end | 1,050 | 28 | 29,400 | \$ | - |
| Church St | Century-1923 S. Church | 500 | 39 | 19,500 | \$ | - |
| Aspen Grove Dr | Century-Vineyard | 1,380 | 54 | 74,520 | \$ | - |
| Hemlock Dr | Ridge-Alpine | 850 | 34 | 28,900 | \$ | - |
| Alpine Dr | Hemlock-Vineyard | 780 | 35 | 27,300 | \$ | - |
| Audubon Dr | Vineyard-Alpine | 840 | 35 | 29,400 | \$ | - |
| Meadow Dr | Vineyard-Mulberry | 600 | 35 | 21,000 | \$ | - |
| Fir Dr | Banyon-Meadow | 250 | 36 | 9,000 | \$ | - |
| Vineyard Dr | Hutchins-Aspen Grove | 900 | 53 | 47,700 | \$ | - |
| Vineyard Dr | Aspen Grove-Alpine | 370 | 35 | 12,950 | \$ | - |
| Harney Ln | 960' E/Stockton-Stockton | 960 | 24 | 23,040 | \$ | - |
| Harney Ln | Stockton-UPRR | 1,250 | 31 | 38,750 | \$ | - |
| Harney Ln | UPRR-Hutchins | 1,200 | 43 | 51,600 | \$ | - |
| Harney Ln | Hutchins-Ham | 2,120 | 43 | 91,160 | \$ | - |
| Harney Ln | Ham-WID Canal | 650 | 43 | 27,950 | \$ | - |
| Harney Ln | WID Canal-2630' W/O WID | 2,630 | 24 | 63,120 | \$ | - |
| Crescent Ave | Lodi-424 S.Crescent | 400 | 47 | 18,800 | \$ | - |
| Crescent Ave | 424 S. Crescent-Kettleman | 4,695 | 44 | 206,580 | \$ | - |
| | | | | | \$ | - |
| TOTAL | | | | 903,100 | \$ | - |

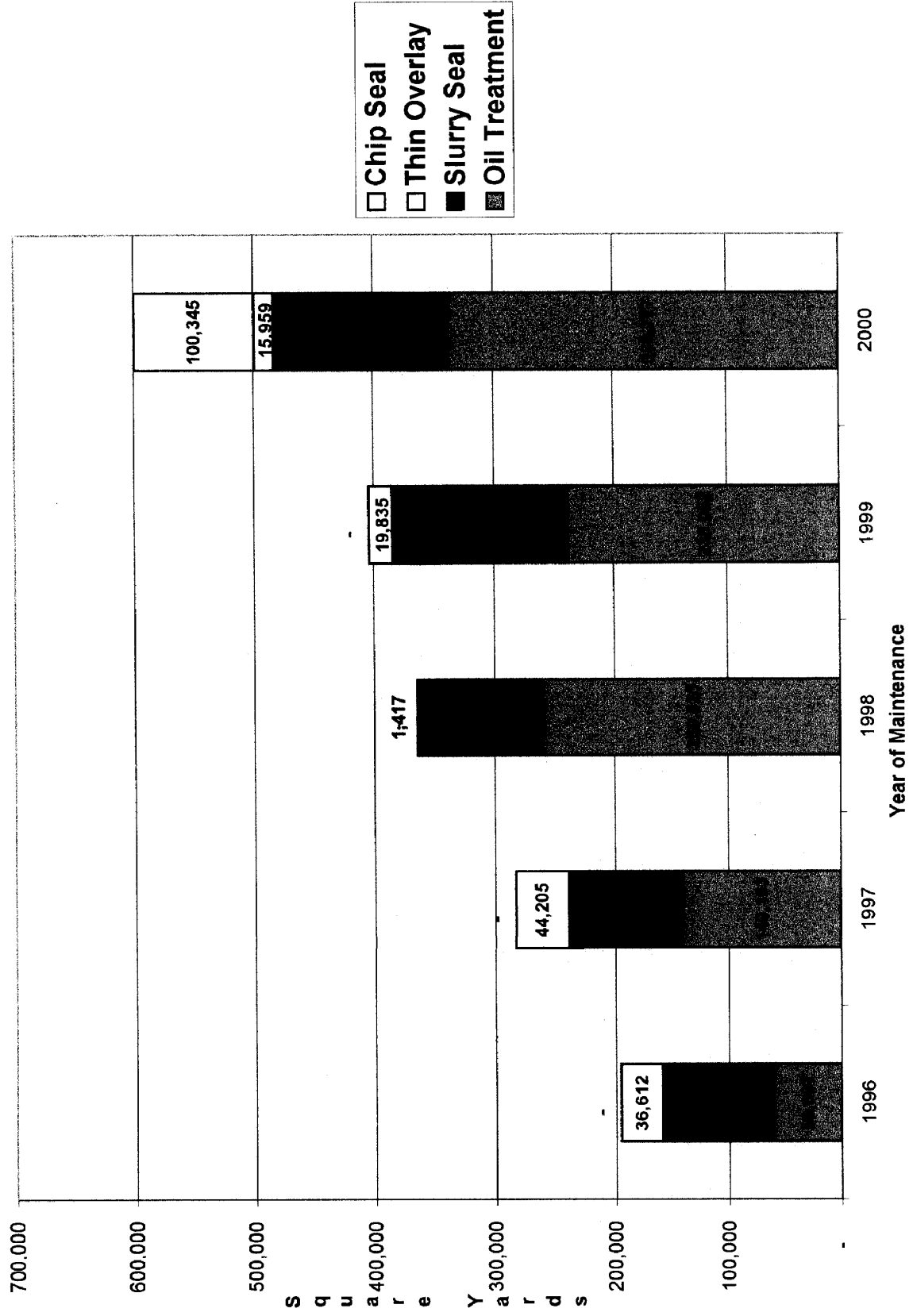
Percent of Total Square Yards for the Fiscal Year 2000/01



Percent of Maintenance Budget Spent in the Fiscal Year 2000/01



Preventative Maintenance Comparison



PAVEMENT MAINTENANCE LIFE EXTENSION CHART

| Maintenance Activity | Average Cost of Process \$/Sq.Yd. | Years of Pavement Life Extension Plus Average Cost Per Square Yard Per Year | | | | Assumed Average Life Extension (yrs) |
|--------------------------------|--|--|------------------------|----------------------|-------------------------|--|
| | | Major/ Arterial | Collector Hvy. Ind. | Commercial /Local | Resident/ Cul-De-Sac | |
| OIL TREATMENT (Rejuvenator) | \$ 0.18 | 1 - 3 \$ 0.09 | 2 - 4 \$ 0.06 | 3 - 5 \$ 0.04 | 4 - 5 \$ 0.04 | 3 |
| FOG/OIL SEAL | \$ 0.00 | N/A | 2 - 5 \$ 0.00 | 3 - 6 \$ 0.00 | 4 - 6 \$ 0.00 | 4 |
| SLURRY SEAL | \$ 0.45 | 3 - 5 \$ 0.11 | 3 - 6 \$ 0.10 | 5 - 8 \$ 0.07 | 6 - 9 \$ 0.06 | 5 |
| CHIP SEAL** | \$ 0.65 | 3 - 5 \$ 0.16 | 4 - 6 \$ 0.13 | 5 - 9 \$ 0.09 | 6 - 9 \$ 0.09 | 6 |
| OVERLAY | \$ 6.50 | 6 - 10 \$ 0.63 | 7 - 12 \$ 0.68 | 8 - 12 \$ 0.48 | 9 - 11 \$ 0.76 | 9 - 11 |
| RECONSTRUCTION* | \$32.25 | 20 \$ 1.69 | 20 \$ 1.57 | 20 \$ 1.59 | 20 \$ 1.57 | 20 |

* Note: Reconstruction occurs at end of Life Cycle.

** Note: Chip seals are normally limited to stop-gap maintenance or pavements without curb and gutters.